

## **ABSTRACT**

### **TRANSIMPEDANCE AMPLIFIER**

**[00026]** A transimpedance amplifier includes a first amplifier, a first MOS resistor device and a first voltage divider circuit. The source terminal of the first MOS resistor device is coupled to the first amplifier inverting input. The voltage divider circuit is coupled between the first amplifier output and the non-inverting input. The output of the first voltage divider is coupled to the first MOS resistor drain terminal. A second amplifier, second MOS resistor device and a second voltage divider circuit is also provided. The output of the second amplifier is coupled to the gate terminal of the first MOS resistor device. The gate terminal of the second MOS resistor device is coupled to the second amplifier output. The drain terminal of the second MOS resistor device is coupled to the second amplifier non-inverting input. The second voltage divider circuit is coupled between the first amplifier output and the second MOS resistor device source terminal, and has an output coupled to the second amplifier inverting input.